

### REMARKS

Claims 1-15 are pending in this application. Claims 1-4, 6, 8-10, have been amended. Claims 13-15 have been added. No new matter has been added through these amendments as the amendments are supported by the specification (see Figures 7-9, 11 and the corresponding text). The specification has been amended to address the Examiner's objections to the underlined sub-section headings.

Applicants respectfully request removal of the rejections under 35 USC §102 and §103 in light of the amendments to claim 1. In particular, claim 1 has been amended to include the feature that a root level having a node group, the node group having k number of nodes, each of the k number of nodes sharing a pointer, each of the k number of nodes stored contiguously in memory; and the feature that the k nodes of the supernode being stored contiguously in memory. Applicants submit that US Patent 6,138,123 to Rathbun is silent as to a pointer shared by the k number of nodes and contiguously storing the data in memory. As specified in added claim 14, the root level and the second level are associated with corresponding memories. Rathbun is silent as to this feature also. US patent 5,463,389 to Klayman does not cure the deficiencies of Rathbun. That is, Klayman is silent as to a pointer shared by the k number of nodes and contiguously storing the data in memory as well as the root level and the second level being associated with corresponding memories. Applicants also traverse the examiner's characterization that Rathbun teaches inserting a value at the root level and proceeding towards the bottom level. As illustrated in Figures 5-9, the inserted value (60) starts at a bottom level and moves toward a top level.

Applicants respectfully request a Notice of Allowance based on the foregoing remarks. If the Examiner has any questions concerning the present amendment, the Examiner is kindly requested to contact the undersigned at (408) 749-6900x 6921. If any other fees are due in connection with filing this amendment, the Commissioner is also authorized to charge

Appl. No. 09/728,147  
Amdt. dated October 8, 2004  
Reply to Office Action dated July 8, 2004

Deposit Account No. 50-0805 (Order No. ALTEP070). A copy of the transmittal is enclosed for this purpose.

Respectfully submitted,  
MARTINE & PENILLA, LLP

A handwritten signature in black ink, appearing to read "Michael L. Gencarella", written in a cursive style.

Michael L. Gencarella, Esq.  
Reg. No. 44,703

Martine & Penilla, LLP  
710 Lakeway Drive, Suite 170  
Sunnyvale, California 94085  
Tel: (408) 749-6900  
**Customer Number 25920**